

**ABSTRACT OF THE DISCLOSURE**

A method and device for forming a cross-linked foam and a cross-linked foam are provided. The method includes the steps of preparing at least one foaming material for cross-linked foaming, the foaming material processed to have a plane or three-dimensional shape; forming at least one interfacing pattern on a surface of at least one of the foaming material using at least one interfacing material that prevents chemical and physical interaction between the foaming materials; and forming a cross-linked foam by foaming the foaming material having the interfacing pattern thereon, the cross-linked foam having a foam body and an internally-formed surface.